

CLAIMS

What is claimed is:

1. A method for associating at least one medical device with a controller that is remote from the medical device, the method comprising the steps of:

providing a device identifier that indicates a device address of the medical device within a communication network;

5 providing a data collector;

obtaining the device address via the data collector;

transferring the device address from the data collector to the controller; and

associating the controller with the medical device so that the controller can communicate with the medical device.

2. The method of claim 1 wherein the obtaining and transferring steps are via wireless communication.

3. The method of claim 2 further including the steps of, after associating, causing the controller to send a first wireless communication to the device address and receiving the first wireless communication at the medical device.

4. The method of claim 3 wherein the step of sending the first communication includes the step of transmitting a controller address of the controller within the communication network.

5. The method of claim 3 further including the step of, in response to the first wireless communication, causing the medical device to perform a safety function.

6. The method of claim 5 wherein the medical device includes an indicator and the safety function includes activating the indicator.

7. The method of claim 5 wherein the medical device includes a transmitter and the safety function includes causing the medical device to transmit a second wireless communication responsive to the first communication.

8. The method of claim 7 wherein the second wireless communication includes the status of the medical device.

9. The method of claim 7 wherein the second communication is transmitted to the controller.

10. The method of claim 5 further including the steps of storing a first patient information set in the medical device indicating information related to a patient for which the medical device has been provided and storing a second patient information set in the controller indicating information related to a patient and wherein the step of causing the
5 controller to send a first wireless communication includes the step of transmitting the second patient information set to the device address, the step of receiving includes receiving the first patient information subset at the medical device and wherein the step of causing the device to perform a first safety function includes comparing the first and second patient information sets.

11. The method of claim 10 further including the step of providing an indicator on the medical device and wherein the step of causing the device to perform the safety function further includes the step of, when the first and second patient information sets are different, activating the indicator.

12. The method of claim 10 wherein the step of storing the first patient information set on the medical device includes the step of storing the first patient information set on an information device, the information device being one of a medication delivery container, a patient mounted device and a physician's computing device, establishing a
5 communication link between the information device and the medical device and transferring the first patient information set from the information device to the medical device.

13. The method of claim 12 wherein the information device is an IV bag.

14. The method of claim 10 wherein the step of storing the first patient information set on the medical device includes the step of providing a medical device interface and entering the first patient information set via the interface device.

15. The method of claim 10 wherein each of the medical device and the controller are system devices, the method further includes the step of providing at least a third system device and wherein the step of storing the second patient information set on the controller includes the step of storing the second patient information set on the third system device,
5 establishing a communication link between the third system device and the controller and transferring the second patient information set from the third system device to the controller.

16. The method of claim 15 wherein the step of providing the third system device includes the step of providing a patient mounted device.

17. The method of claim 16 wherein the step of providing a patient mounted device includes providing a wrist band.

18. The method of claim 10 wherein the step of storing the second patient information set on the controller includes the step of providing a controller interface and entering the second patient information set via the interface device.

19. The method of claim 7 further including the steps of storing a first patient information set in the medical device indicating information related to a patient for which the medical device has been provided and storing a second patient information set in the controller indicating information related to a patient and wherein the step of causing the device to perform a safety function includes the steps of transferring a second wireless communication to the controller including the first patient information set and comparing the first and second patient information sets.

20. The method of claim 19 further including the step of providing an indicator on the medical device and wherein the step of causing the device to perform the safety function further includes the step of, when the first and second patient information sets are different, activating the indicator.

21. The method of claim 1 wherein the medical device is an infusion pump.

22. The method of claim 2 further including the steps of, after associating, causing the controller and medical device to perform a health safety function.

23. The method of claim 22 further including the steps of storing a first patient information set in the medical device indicating information related to a patient for which the medical device has been provided and storing a second patient information set in the controller indicating information related to a patient, the medical device and controller each being system devices and the first and second patient information sets each being identifying information sets and, wherein, the step of performing a health safety function further includes the steps of causing a first of the system devices to transmit a first of the identifying information sets to a second of the system devices, receiving the first identifying information set at the second system device and comparing the first and second identifying information sets.

24. The method of claim 23 further including the step of providing an indicator linkable to the second of the system devices and wherein the step of performing a health safety function further includes the step of, where the first and second identifying sets are different, activating the indicator.

25. A method for monitoring at least one IV bag that is linked to at least one pump assembly of an IV pump, the method comprising the steps of:

receiving a first patient information set indicating a patient to be associated with the pump;

5 associating the pump with the patient indicated by the first patient information set;
sensing attachment of at least a first IV bag to a first pump assembly of the pump;
and

when all IV bags are detached from the pump assembly, performing a health safety function.

26. The method of claim 25 wherein the step of performing a health safety function includes the step of disassociating the pump assembly and the patient.

27. The method of claim 26 wherein the step of performing a health safety function further includes the step of transmitting pump status information indicative of the fact the pump is not longer associated with the patient.

28. The method of claim 26 wherein the step of associating includes storing the first patient information set in a pump memory and the step of disassociating includes erasing the first patient information set from the memory.

29. The method of claim 25 further including the step of providing an interface linkable to the pump and wherein the step of performing a health safety function includes providing an indication via the interface that all of the IV bags have been detached from the pump and requesting authorization to disassociate the pump from the patient.

30. The method of claim 25 wherein the step of sensing includes providing an IV bag sensor where the sensor is one of a micro-switch, an electrical connection, a flow sensor, and a light detector.

31. The method of claim 25 wherein the pump receives the first patient information set by performing one of: reading a memory device associated with an IV bag corresponding to the IV line, receiving data entered using keys, reading a patient wristband, or receiving patient information from a data collector that has read a patient wristband.

32. The method of claim 25 further including the step of, when the pump is turned off, disassociating the pump from the patient.

33. The method of claim 25 wherein the pump includes an indicator and the method further includes the step of, when the pump is turned on and the pump senses that an IV bag is attached to the pump, activating the indicator.

34. A communication apparatus for use with an infusion pump and an IV bag including an information device attached thereto, the pump including a processor, the apparatus comprising:

- an information obtainer for obtaining information from the information device when the obtainer is proximate the device, the information obtainer remote from the processor;
- a tubing line linking the bag to the pump;
- a communicator linked to the processor; and
- a data bus between the communicator and the obtainer wherein the bus is attached to the tubing.

35. The apparatus of claim 34 wherein the tubing line includes a wall member and the data bus is embedded within the wall member.

36. A communication apparatus for use with an infusion pump and an IV bag including an information device attached thereto, the pump including a processor, the apparatus comprising:

an information obtainer for obtaining information from the information device when
5 the obtainer is proximate the device, the information obtainer remote from the processor;
a receiver linked to the processor; and
a transmitter linked to the obtainer and wherein information is transmitted from the transmitter to the receiver via wireless communication.

37. The apparatus of claim 36 also for use with a tubing line linking the bag to a pump inlet wherein the end of the line receivable by the pump includes a visual marking identifying the specific line, at least one pump inlet also includes the specific marking, each inlet includes a different marking, lines are only linked to inlets having similar markings, the
5 transmitter, upon transmitting, indicating the specific line to which the transmitter is linked along with information obtained by the obtainer, the processor, upon receiving a transmission, correlating a corresponding IV bag with a specific inlet.

38. The apparatus of claim 37 wherein the markings are specific colors.

39. The apparatus of claim 37 wherein the lines are formed of translucent colored plastic.

40. The apparatus of claim 36 also for use with a tubing line linking the bag to a pump inlet wherein the end of the line receivable by the pump includes a line identifier identifying the specific line, each pump inlet also includes a line identifier reader, the
5 transmitter, upon transmitting, indicating the specific line along with information obtained by the obtainer, the processor, upon receiving a transmission, correlates a corresponding IV bag with a specific inlet.

41. The apparatus of claim 40 wherein the line identifier is one of a bar code, and an RF identification tag.

42. A method for controlling an infusion pump assembly comprising the steps of:
providing a prescription database indicating patients and corresponding prescribed medications;

- 5 providing at least one IV bag including an information device that indicates medication information including the medication included in the IV bag;
obtaining medication information from the information device;
providing at least one patient identification device including information identifying a specific patient;
10 obtaining the patient identifying information from the patient identification device;
accessing the database and identifying the prescriptions for the patient identified by the identification device;
comparing the medication in the IV bag with the prescriptions; and
determining if the medication in the IV bag is administrable to the patient.

43. The method of claim 42 further including the step of, when the medication is administrable to the patient, activating the pump.

44. The method of claim 43 further including the step of retrieving dosing instructions and wherein the step of activating the pump includes controlling the pump as a function of the dosing instructions.

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45. A method for controlling an infusion pump assembly comprising the steps of:
providing an allergy database indicating patients and corresponding allergies;
providing at least one IV bag including an information device that indicates
medication information including the medication included in the IV bag;
5 obtaining medication information from the information device;
providing at least one patient identification device including information identifying a
specific patient;
obtaining the patient identifying information from the patient identification device;
accessing the database and identifying the allergies for the patient identified by the
10 identification device;
comparing the medication in the IV bag with the allergies; and
determining if the medication in the IV bag is administrable to the patient.

46. The method of claim 45 wherein the step of providing the database includes
the step of providing a patient mounted device including the database.

47. The method of claim 46 wherein the step of providing a patient mounted
device includes the step of providing a wristband.

48. The method of claim 47 further including the step of, when the medication is
administrable to the patient, activating the pump.

49. A method for controlling an infusion pump assembly comprising the steps of:
providing a contraindication database indicating medications that should not be taken
together;

- 5 providing a prescription database indicating patients and corresponding
prescriptions;
- providing at least one IV bag including an information device that indicates
medication information including the medication included in the IV bag;
- obtaining medication information from the information device;
- providing at least one patient identification device including information identifying a
10 specific patient;
- obtaining the patient identifying information from the patient identification device;
- accessing the prescription database and identifying all current prescriptions for the
patient identified by the identification device;
- accessing the contraindication database and identifying all contraindicated
15 medications corresponding to the medication in the IV bag;
- comparing the contraindicated medications with the prescribed medications; and
determining if the medication in the IV bag is administrable to the patient.

50. The method of claim 49 further including the step of, when the medication is
administrable to the patient, activating the pump.

51. A method for controlling an infusion pump assembly comprising the steps of:
 providing at least a first IV bag including an information device that indicates
 medication information corresponding to the first IV bag;
 providing at least a second IV bag including an information device that indicates
 5 medication information corresponding to the second IV bag
 obtaining medication information from the information devices;
 employing the obtained information to determine a control regimen for the
 medications in the IV bags; and
 controlling the infusion pump in accordance with the control regimen.

52. The method of claim 51 wherein the step of employing includes the step of
 determining titration rates for each of the first and second medications.

53. The method of claim 52 wherein the step of determining titration rates
 includes the step of determining the prescribed volumes for each of the first and second
 medications, comparing the total prescribed volume with a maximum total titration volume
 and performing a health safety function when the total prescribed volume exceeds the
 5 maximum volume.

54. The method of claim 53 further including the step of providing an indicator
 and wherein the step of performing a health safety function includes the step of activating
 the indicator.

55. The method of claim 53 wherein the health safety function includes limiting
 the total titration volume to a rate below the maximum volume.

56. A method for controlling an infusion pump assembly comprising the steps of:
providing at least a first IV bag including an information device that indicates
medication information corresponding to the first IV bag;
providing at least one physician identification device;
5 obtaining medication information from the information devices;
obtaining a physician's identification from the physician's identification device; and
determining if the physician is authorized to administer the first medication to a
patient.

57. The method of claim 56 wherein, when the physician is authorized to
administer the first medication to a patient, the method further includes the step of activating
the pump.

58. The method of claim 57 further including the step of providing a clock for
tracking dates and wherein the step of obtaining other information includes determining the
medication information date and the physician identifying date when the medication
information and the physician identifying information are received, respectively and, where
5 the step of employing includes comparing the medication information and the physician
identifying dates and, where the dates are separated by greater than a threshold time period,
disabling the infusion pump.

59. The method of claim 57 wherein the medication information includes a
physician indicator indicating at least one physician authorized to administer the medication
in the IV bag and wherein the step of obtaining the medication information includes obtaining
the physician indicator and the step of determining if the physician is authorized to
5 administer the medication includes comparing the physician identification with the physician
indicator.

60. The method of claim 57 further including the step of providing a physician
database that identifies physicians authorized to administer medications and wherein the
step of employing further includes the step of accessing the physician database, identifying
the physician identified by the physician identifier in the database and determining if the
5 physician is authorized to administer the medication in the IV bag.

61. A method for controlling an infusion pump assembly comprising the steps of:
associating the IV pump with a specific patient;
providing at least a first IV bag including an information device that indicates
medication information corresponding to the first IV bag;

- 5 obtaining medication information from the information device;
obtaining information related to the specific patient associated with the pump;
employing the medication information and the specific patient information to
determine a control regimen for the medication in the IV bag; and
controlling the infusion pump in accordance with the control regimen.

62. The method of claim 61 wherein the medication information includes a
second patient identifier indicating a patient for which the medication in the at least one IV
bag has been dispensed and wherein the step of employing includes the step of comparing
the second patient identifier and the information indicating the patient associated with the
infusion pump.

63. The method of claim 62 wherein the step of controlling includes activating the
pump when the patient identifier and the information indicating the patient associated with
the infusion pump indicate the same patient.

64. The method of claim 62 further including the step of providing an interface
device and wherein the step of controlling includes causing the interface device to indicate
when the second patient identifier and the information indicating the patient associated with
the infusion pump fail to indicate the same patient.

65. The method of claim 61 wherein the step of associating includes linking a
second IV bag to the pump and obtaining a second patient identifier there from prior to
providing the at least one IV bag.

66. A method for controlling an infusion pump assembly comprising the steps of:
providing a first IV bag including a first information device indicating information
related to the first IV bag;

obtaining the information from the first information device;

5 associating the pump with the first IV bag;

removing the first IV bag from the pump;

providing a second IV bag including a second information device that indicates
medication information corresponding to the second IV bag;

obtaining medication information from the second information device;

10 comparing the first and second bag information to determine if the first and second
medications correspond to similar prescriptions.

67. The method of claim 66 further including the step of performing a health
safety function based on the comparison.

68. The method of claim 67 wherein the step of performing a health safety
function includes the step of, when the first and second medications are identical and
correspond to the same prescription, facilitating dispensation of the second medication via
the pump.

69. The method of claim 68 further including the step of, prior to providing the
second IV bag, setting titration rate of the medication in the first IV bag and wherein the
method further includes the step of obtaining the titration rate for the first IV bag when the
first IV bag is removed from the pump and, when the second IV bag is provided, setting the
5 titration rate for the second IV bag to the obtained rate.

70. The method of claim 67 wherein the step of performing a health safety
function includes the step of, when the first and second medications are identical and
correspond to different prescriptions for the same patient, facilitating dispensation of the first
medication via the pump.

71. A method for controlling an infusion pump including at least one infusion pump assembly where a separate line links an IV bag to the at least one pump assembly, the method comprising the steps of:

- associating the at least one pump assembly with a specific control regimen
- 5 corresponding to the linked IV bag;
- providing a sensor for the line to determine when the line is disconnected from the at least one infusion pump assembly;
- monitoring the sensor; and
- when the sensor indicates that the line has been disconnected from a corresponding
- 10 pump assembly, disassociating the pump assembly from the corresponding control regimen.

72. The method of claim 71 further including the step of providing an indicator and wherein, when the assembly is disassociated, causing the indicator to indicate the disassociation.

73. The method of claim 72 further including the step of providing a remote controller that includes the indicator and wherein the step of causing the indicator includes transmitting a signal to the controller and causing the indicator to indicate.

74. The method of claim 71 further including the step of providing a memory and wherein the step of associating includes storing the specific control regimen in the memory and the step of disassociating includes the step of erasing the memory.

75. The method of claim 74 wherein the step of providing the memory includes providing the memory on the pump assembly.

76. The method of claim 74 wherein the step of providing the memory includes providing the memory on a control device that is remote from the pump assembly.

77. A method for controlling an infusion pump including at least one pump assembly comprising the steps of:

providing an information device that indicates a first set of process information related to an infusion process, the first information set including a patient identifier;

5 obtaining the first information set from the information device; and
associating the pump with the patient.

78. The method of claim 77 wherein the step of providing includes providing a patient identification device including the first information set.

79. The method of claim 78 wherein the step of providing includes providing a wristband secured to a patient.

80. The method of claim 77 further including the step of, after associating the pump with the patient identifier, providing a second information device including a second set of process information related to the process to be performed by at least one of the pump assemblies, obtaining the second information set and associating at least one of the pump
5 assemblies with the second information set.

81. The method of claim 80 wherein the step of providing the second information device includes providing an IV bag including a tag that includes the second information set and wherein the step of obtaining includes obtaining the second information set from the tag.

82. The method of claim 81 wherein the patient identifier is a first patient identifier and the second information set includes a second patient identifier indicating the patient for which the IV bag has been prepared and, wherein, the method further includes the steps of, prior to associating the second information set with the assembly, comparing the first and the
5 second patient identifiers and, only when the first and second identifiers indicate the same patient, associating the second information set with the assembly.

83. The method of claim 82 wherein, when the first and second patient identifiers are different, indicating that the first and second patient identifiers are different.

84. The method of claim 83 further including the steps of linking a tubing line between the IV bag and the at least one pump assembly and activating the pump assembly when the first and second patient identifiers indicate the same patient.

85. The method of claim 84 wherein the obtained information also medication dispensation information and wherein the step of activating includes controlling the at least one pump assembly to operate according to the dispensation information.

86. The method of claim 85 wherein the medication dispensation information includes infusion rate and duration.

87. The method of claim 85 wherein the medication dispensation information includes medication amount.

88. The method of claim 83 further including the steps of providing a sensor for sensing when the IV bag is de-linked from the at least one pump assembly and, when the bag is de-linked, disassociating the at least one pump assembly and the patient.

89. The method of claim 88 further including the steps of providing a sensor for sensing when the IV bag is de-linked from the at least one pump assembly and, when the bag is de-linked, disabling the at least one pump assembly.

90. The method of claim 89 wherein the step of providing includes providing an IV bag mounted device.

91. The method of claim 90 further including the step of, after associating the pump with the patient, providing a second information device including a second set of process information related to a process to be performed by the least one of the pump assembly and obtaining the information from the second information device.

92. The method of claim 91 wherein the patient identifier is a first patient identifier and the second information set includes a second patient identifier indicating the patient to which the pump assembly is to be connected and, wherein, the method further includes the steps of comparing the first and second patient identifiers and, when the first and second
5 identifiers indicate the same patient, enabling the at least one pump assembly.

93. The method of claim 77 further including the step of linking an IV bag corresponding to the infusion process to the at least one pump assembly.

94. The method of claim 93 further including the step of enabling the at least one pump assembly.

95. The method of claim 94 further including the step of providing a sensor for sensing when the IV bag is linked to the at least one pump assembly and, when the bag is de-linked from the at least one pump assembly, disabling the at least one pump assembly.

96. The method of claim 95 further including the step of disassociating the at least one assembly from the patient when the IV bag is de-linked.

97. The method of claim 90 further including the steps of, after associating the pump with the patient identifier:

providing a second IV bag including a second information device that includes a second patient identifier indicating the patient for whom the second IV bag has been prepared;

obtaining the second information set from the second information device; and comparing the first and second identifiers.

98. The method of claim 97 further including the step of performing a health safety function based on the comparison.

99. The method of claim 98 wherein the step of performing a health safety function includes the step of, when the first and second identifiers are different, disabling the pump.

100. The method of claim 98 wherein the pump includes an indicator and wherein the step of performing a health safety function includes the step of, when the first and second identifiers are different, activating the indicator.

101. The method of claim 98 wherein the pump includes a mechanical closure member for closing pump inlet ports and wherein the step of performing a health safety function includes the step of, when the first and second identifiers are different, locking the inlet ports.

102. A method for controlling an infusion pump including at least one pump assembly comprising the steps of:

providing an information device that indicates a first set of process information related to an infusion process, the first information set including a physician identifier

5 identifying at least one physician;

obtaining the first information set from the information device; and

associating the pump with the at least one physician identified by the physician identifier.

103. The method of claim 102 wherein the identifier is a first physician identifier and the method further includes the steps of providing a physician identifier device including at least a second physician identifier and obtaining the second physician identifier.

104. The method of claim 103 wherein the times the when the first and second physician identifiers are obtained are first and second times and wherein the method further includes the steps of, determining the duration of the period and controlling the pump as a function of the duration.

105. The method of claim 104 wherein the step of controlling includes disabling the pump when the period duration exceeds a threshold duration and enabling the pump when the period duration is less than the threshold duration.

106. A method for controlling an infusion process comprising the steps of:
prior to releasing an IV bag and corresponding medication for delivery to a patient,
identifying information specifying a corresponding prescription;
providing an information device on the bag including the specifying information;
5 providing a database including prescription information;
subsequent to release, obtaining the information from the information device
including the prescription;
searching the database for the prescription; and
where the prescription is in the database, providing the date on the information
10 device.

107. The method of claim 106 wherein the information device is an electronic device and wherein the step of providing the date includes the step of writing a current date to the device.

108. The method of claim 106 wherein the information device is a first device and is printed and the step of providing the date includes the steps of printing a new information device to be secured to the IV bag and securing the new device to the IV bag.

109. The method of claim 108 further including the step of disabling the first device.

110. The method of claim 109 wherein the step of disabling includes the step of appending the new device over the first device.

111. A method for communicating with a plurality of infusion pumps, the method comprising the steps of:

providing a remote controller; and

associating each of the plurality of pumps with the remote controller for subsequent communication.

112. The method of claim 111 wherein the controller is a system device and the plurality of pumps also collectively comprise a system device and wherein the step of associating includes the steps of:

associating each of the plurality of pumps with a first patient identifier;

providing an identifying device including a second patient identifier that identifies a patient;

using the controller to obtain the second patient identifier from the identifying device, the first and second patient identifiers being identifying information sets;

transmitting a first of the identifying information sets from a first of the system devices to a second of the system devices;

the second of the system devices comparing the first and second identifying information sets; and

where the sets indicate the same patient, associating the first and second system devices.

113. The method of claim 112 wherein the remote controller is the first system device and each of the pumps performs the comparison.

114. The method of claim 113 wherein the first identifying information set includes a remote controller identifier and wherein, when the first and second sets indicate the same patient, the method further includes the step of storing the remote controller identifier in the pumps for subsequent communication.

115. The method of claim 113 wherein, when the first and second sets indicate the same patient, the method further includes the steps of transmitting pump identifiers to the controller and the controller, upon receiving the pump identifiers, storing the pump identifiers for subsequent communication.

116. The method of claim 112 wherein the pumps comprise the first system device and the controller performs the comparison.

117. The method of claim 116 wherein the first identifying information set includes a separate pump identifier for each of the plurality of pumps and wherein, when the first and second sets indicate the same patient, the method further includes the step of storing the pump identifiers in the controller for subsequent communication.

118. The method of claim 116 wherein, when the first and second sets indicate the same patient, the method further includes the steps of transmitting a controller identifier to each of the pumps and the pumps, upon receiving the controller identifier, storing the controller identifier for subsequent communication.

119. The method of claim 112 wherein the step of providing an identifying device includes the step of providing a patient mounted device.

120. The method of claim 112 wherein the step of providing an identifying device includes the step of providing an infusion pump including the identifying device.

121. The method of claim 111 further including the step of, after associating the controller with the plurality of pumps, performing at least one of monitoring and controlling each of the associated pumps via the controller.

122. The method of claim 121 wherein each pump includes at least one pump assembly and wherein the step of controlling includes controlling the titration rate of each of the pump assemblies.

123. The method of claim 121 wherein the step of associating includes the step of obtaining, via the controller, information related to each of the medications to be pumped by each of the plurality of pump assemblies.

124. The method of claim 123 further including the step of, based on the medication information from each of the pumps, performing at least one health safety function.

125. The method of claim 124 wherein the step of performing at least one health safety function includes at least one of controlling titration rates, indicating a problem when two or more medications should not be administered together and indicating an allergy.

126. A method for controlling an infusion pump, the method comprising the steps of:

providing at least first and second IV bags;

linking the first bag to the infusion pump;

5 storing information related to a first infusion process corresponding to the first bag;

de-linking the first bag from the pump assembly;

obtaining information describing a second infusion process corresponding to the second bag;

comparing the second infusion process information to the first infusion process

10 information to determine if the second process is a continuation of the first process and

where the second process is a continuation of the first process, enabling the pump assembly to perform the second process.

127. The method of claim 126 further including the step of altering the first process prior to storing the information related to the first process and, wherein, prior to enabling the pump assembly to perform the second process, the method further includes the steps of indicating the modification to the first process and seeking authority to similarly alter the
5 second process.

128. The method of claim 126 wherein the step of providing includes providing information devices on each of the first and second bags including first and second process information sets corresponding to each of the first and second processes and wherein the steps of storing and obtaining include storing and obtaining the first and second process
5 information sets, respectively.

129. A method of controlling an IV pump using a processor, the method comprising the steps of:

- obtaining patient information from a patient identifier;
- recording a collection time when the patient information is obtained;
- providing patient information and collection time to the processor;
- comparing the collection time with the current time; and
- based on the comparison, performing a health safety function.

130. The method of claim 129 wherein the step of obtaining includes the steps of providing a data collector and using the data collector to obtain the patient information from the patient identifier and wherein the step of providing includes the step of transferring the patient information and collection time to the IV pump processor.

131. The method of claim 129 wherein the step of performing a health safety function includes the step of disabling the pump when the period between the collection and current time is greater than a threshold period.

132. The method of claim 129 further including the step of linking an indicator to the processor and wherein the step of performing a health safety function includes activating the indicator when the period between the collection and current time is greater than a threshold period.

133. A method for collecting and using patient information and IV bag information using a data collector, the method comprising the steps of:

providing an indicator;

5 using the data collector to obtain a first patient information set from a patient identifier;

using the data collector to obtain a second patient information set from an IV bag identifier;

determining a first date when the first patient information set is collected;

determining a second date when the second patient information set is collected;

10 comparing the first and second dates; and

when the duration between the first and second dates exceeds a threshold period, activating the indicator.

134. The method of claim 133 wherein the data collector obtains the second patient information set prior to obtaining the first patient information set.

135. The method of claim 133 further including the step of transferring at least a portion of the second patient information set to an IV pump.

136. A method for collecting and using patient information and IV bag information using a data collector, the method comprising the steps of:

providing an indicator;

using the data collector to obtain a first patient information set from a patient

5 identifier;

using the data collector to obtain a second patient information set from an IV bag identifier;

determining a first date when the first patient information set is collected;

determining a second date when the second patient information set is collected;

10 determining a current date, the current date being a third date;

comparing the first, second and third dates; and

when the duration between at least one of the first and third dates and the second and third dates exceeds a threshold period, activating the indicator.

137. The method of claim 136 wherein the indicator is linked to one of the data collector and an infusion pump.

138. The method of claim 136 further including the step of providing a comparison device linked to one of the collector and an infusion pump and wherein the step of comparing is performed by the comparison device.

139. A method for interacting with an infusion pump, the method comprising the steps of:

providing an IV bag including an attached information device including a first information set related to an infusion process associated with a medication in the IV bag;

5 providing an information collector for obtaining the first information set from the information device;

obtaining the first information set from the information device via the collector;

using the first information set to identify a second information set related to the infusion process;

10 providing an interface; and

indicating the second information set via the interface.

140. The method of claim 139 further including the step of providing a database linked to the collector and that correlates at least a subset of the first information set with second information sets and wherein the step of using includes accessing the database and identifying the second information set.

141. The method of claim 139 wherein the second information set includes at least one of instructions regarding the infusion process related to the IV bag, allergy warnings, contra-medication information and genomics.

142. The method of claim 139 also for controlling the infusion process and wherein the step of indicating via the interface includes requiring an affirmative indication from a system user that the user understands the instructions prior to activating the infusion process.

143. A method for using a medical device with a medical product that is associated with medical product information to provide enhanced patient care, the method comprising the steps of:

- 5 providing an information device associated with the medical product, the information device including medical product information;
- obtaining the medical product information from the information device;
- based on at least the medical product information, identifying special use instructions related to the medical product;
- providing an interface; and
- 10 presenting the special use instructions via the interface.

144. The method of claim 143 further including the step of determining if the special use instructions have been followed.

145. The method of claim 144 further including the step of providing a timing device, timing a period beginning when the special use instructions are presented and ending when the special use instructions have been followed and, when the period exceeds a threshold period, indicating that the period has exceeded the threshold period.

146. The method of claim 145 wherein the step of indicating includes providing an alarm and indicating by activating the alarm.

147. The method of claim 145 further including the step of disabling the medical device that the medical product is to be used with when the indication is provided.

148. The method of claim 143, wherein the special use instructions are part of the medical product information.

149. The method of claim 143 further including the step of storing the special use instructions on a database server correlated with the medical product information and wherein the step of determining includes accessing the database server and correlating the product information with the special use instructions.

150. The method of claim 143 wherein the step of presenting the special use instructions is performed by the medical device.

151. The method of claim 143 wherein the step of presenting the special use instructions is performed by a controller that is separate but linked to the medical device.

152. A method for controlling an infusion pump assembly comprising the steps of:
providing a blood type database indicating medications that should not be taken by
persons with specific blood types;

- 5 providing at least one IV bag including an information device that indicates
medication information including the medication included in the IV bag;
- obtaining medication information from the information device;
- providing at least one patient identification device including information identifying a
specific patient;
- obtaining the patient identifying information from the patient identification device;
- 10 accessing the blood type database and identifying all medications that the patient
should not take; and
- determining if the medication in the IV bag is administrable to the patient.

153. The method of claim 152 further including the step of, when the medication is
administrable to the patient, activating the pump.

154. A method for associating at least one medical device with a controller that is remote from the medical device wherein each of the controller and the medical device are network devices, the method comprising the steps of:

storing a first patient information set in the medical device indicating information

5 related to a patient for which the medical device has been provided;

storing a second patient information set in the controller indicating information related to a patient;

transferring the at least a sub-set of the patient information set from a first of the network devices to a second of the network devices;

10 comparing the transferred information set to at least a subset of the information set stored in the second of the network devices;

where the compared information indicate the same patient, associating the controller with the medical device;

after association, determining when a terminating event occurs and, when a

15 terminating event occurs, dis-associating the controller and the medical device.

155. The method of claim 154 wherein the terminating events include turning off of the controller or medical device, de-selection of a patient, or termination of the communication link between the controller and medical device.

156. The method of claim 154 wherein the second network device includes an indicator and the method further includes the step of activating the indicator when the compared patient information sets are identical.

157. The method of claim 154 wherein the second network device includes an indicator and the method further includes activating the indicator when the compared patient information sets are different.

158. The method of claim 154 wherein the controller is the first network device and wherein the method further includes transmitting a message from the medical device to the controller as a function of the comparison.

159. The method of claim 154 wherein the controller is the first network device and wherein the method further includes transmitting a message from the medical device to the controller in response to reception of the subset of the first patient information set.

160. The method of claim 154 wherein the step of storing the first patient information set on the medical device includes the step of storing the first patient information

set on an information device, the information device being one of a medication delivery container, a patient mounted device and a physician's computing device, establishing a communication link between the information device and the medical device and transferring the first patient information set from the information device to the medical device.

161. The method of claim 160 wherein the information device is an IV bag.

162. The method of claim 154 wherein the step of storing the first patient information set on the medical device includes the step of providing a medical device interface and entering the first patient information set via the interface device.

163. The method of claim 154 wherein the step of storing the second patient information set on the controller includes the step of storing the second patient information set on a patient mounted device, establishing a communication link between the patient mounted device and the controller and transferring the second patient information set from the patient mounted device to the controller.

164. The method of claim 154 wherein the step of storing the second patient information set on the controller includes the step of providing a controller interface and entering the second patient information set via the interface device.

165. The method of claim of 154 wherein the step of storing the first patient information set includes the steps of providing a patient identification device including a patient identifier, providing a sensor linked to the medical device, using the sensor to read the patient identifier and storing the identifier as at least a portion of the first patient information set.

166. The method of claim 165 further including the steps of, after storing the patient identifier, providing an information device including a process information set related to a process to be performed by the medical device, obtaining the process information set and storing the process information set as at least a part of the first patient information set.

167. The method of claim 154 further including the step of providing an indicator linkable to at least one of the network devices and, when a termination event occurs, activating the indicator.

168. The method of claim 167 wherein the step of providing an indicator includes the step of providing an indicator on the controller.

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169. A method for establishing communication between a controller and several medical devices corresponding to a specific patient so that the controller can be used to perform at least one of monitoring and controlling the medical devices, a patient identifier corresponding to the patient, the method comprising the steps of:

5 associating each of the medical devices with the patient identifier;
obtaining the patient identifier via the controller; and
establishing communication between the controller and each of the medical devices associated with the patient identifier.

10 170. The method of claim 169 further including the step of providing a patient identifier device that includes the patient identifier and wherein the step of obtaining includes obtaining the patient identifier from the patient identifier device.

171. The method of claim 169 wherein the step of obtaining includes providing an interface device linked to the controller and manually entering the patient identifier.

172. The method of claim 169 wherein the step of establishing communication includes periodically requesting status updates from each device associated with the patient identifier and receiving responses from each of the associated devices.

173. The method of claim 169 wherein the step of establishing communication includes the step of identifying each medical device that is associated with the patient identifier, identifying a network address corresponding to each of the medical devices and commencing communicating with each of the medical devices via the network addresses.

174. The method of claim 173 wherein each of the controller and the medical devices is a system device, the patient identifier obtained by the controller is a first patient identifier and the patient identifiers associated with the medical devices are second patient identifiers, and wherein the step of identifying includes the step of transmitting the patient
5 identifier from a first of the system devices to a second of the system devices, comparing the first and second patient identifiers and, where the first and second patient identifiers are identical identifying the medical device corresponding to the second patient identifier.

175. The method of claim 174 wherein the step of transmitting includes causing each of the medical devices to transmit the second patient identifiers to the controller, the step of identifying the medical device includes identifying a network address corresponding to the medical device and wherein the step of commencing includes storing the medical
5 device address, transmitting the controller address to the medical device and storing the

controller address, the controller and medical device communicating via the stored addresses.

176. The method of claim 170 wherein the step of providing a patient identifier device includes the step of providing a patient mounted patient identifier device.

177. The method of claim 176 wherein the step of associating the medical devices with the patient identifier includes the step of obtaining the patient identifier from the patient mounted device via each of the medical devices.

178. The method of claim 177 wherein the obtaining steps include obtaining via wireless communication.

179. The method of claim 177 wherein the step of establishing communication includes the steps of determining which of the medical devices are associated with the patient identifier, identifying network addresses corresponding to each of the associated devices and commencing communication with each of the identified devices via the addresses.

180. The method of claim 169 wherein the controller includes an indicator and the method includes the step of activating the indicator when a patient identifier is obtained.

181. The method of claim 169 further including the step of providing an indicator and wherein, when the association between a medical device and the patient identifier is terminated, the method further includes the step of activating the indicator.

182. The method of claim 181 wherein the step of providing an indicator includes providing an indicator on the controller.

183. A method for establishing communication between a controller and several medical devices corresponding to a specific patient so that the controller can be used to perform at least one of monitoring and controlling the medical devices and patient identifier corresponding to the patient, the method comprising the steps of:

- 5 associating each of the medical devices with the patient identifier;
providing a patient identifier device that includes related device indicators, a separate indicator indicating each of the medical devices associated with the patient identifier;
obtaining the medical device indicators from the patient identifier device via the controller; and
- 10 establishing communication between the controller and each of the medical devices corresponding to the indicators..

184. The method of claim 183 wherein the step of establishing communication includes identifying a network address for each of the medical devices, storing each one of the network addresses in the controller and transmitting and receiving messages to and from the network addresses.

185. A method for collecting and using patient information using a data collector where the collector includes at least one activation button, the method comprising the steps of:

5 providing at least first and second devices having first and second memories;
storing corresponding first and second indicators in the first and second memories, respectively;

activating the at least one activation button and, during activation:
collecting the first and second indicators from the first and second memories via the collector; and

10 where the first and second indicators are not both collected during a single button activation, performing a safety function.

186. The method of claim 185 wherein the first and second devices including a patient mounted device and a medical device.

187. The method of claim 186 wherein the medical device is an IV bag identifier.

188. The method of claim 185 further including the step of providing a third device having a third memory and storing information related to the first and second indicators in the third memory, the step of collecting including collecting information from each of the first, second and third devices and, wherein, the step of performing a safety function includes
5 performing the function when information is not collected from each of the first, second and third devices during a single activation.

189. The method of claim 188 wherein the first, second and third devices are a patient mounted device, a medicant delivery device and a medical delivery system.

190. The method of claim 185 wherein each of the devices is electronic.

191. The method of claim 185 further including the step of, when the first and second indicators are collected during the same activation period, enabling a medical process.

192. The method of claim 185 wherein the safety function includes disabling a medical process.